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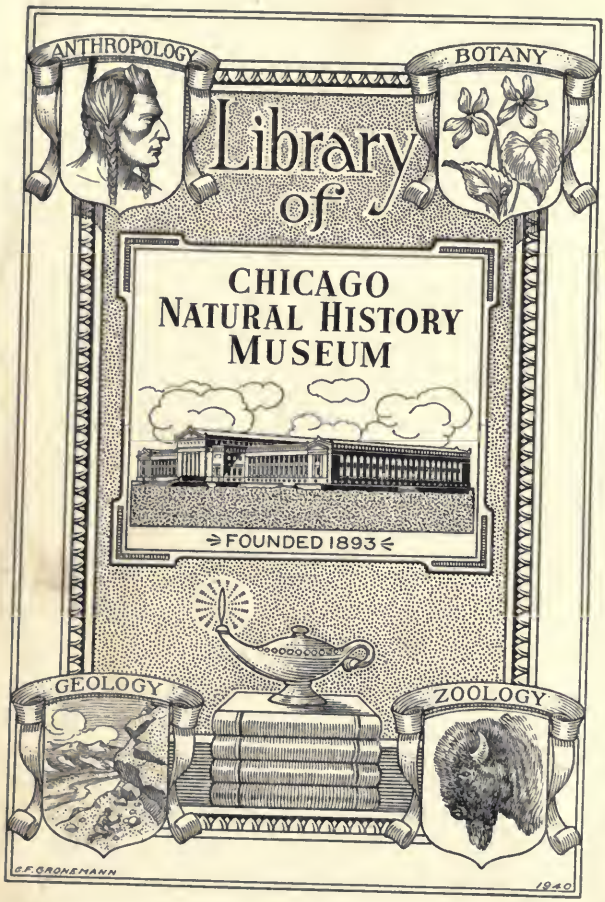
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THE MEDORA SITE

WEST BATON ROUGE PARISH, LOUISIANA

BY

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PREFACE

The Medora Site in West Baton Rouge Parish, Louisiana, consisted of two Plaquemine Period mounds separated by a plaza. In the winter of 1939–40 excavation of this site was undertaken by the Louisiana State Archaeological Survey, a joint project of Louisiana State University and the federal Work Projects Administration.

The Louisiana State Archaeological Survey was directed by Dr. James A. Ford, now of the American Museum of Natural History, assisted by me.

Significant type collections, field notes, and laboratory analyses of the Medora Site, formerly on file at Louisiana State University, are now deposited in Field Museum of Natural History.

The excavation of the site was under the immediate supervision of Mr. Edwin B. Doran, Jr., and the materials were processed in the Louisiana State University Laboratory under the supervision of Mr. Walter W. Beecher. Dr. Ford and I analyzed and interpreted the evidence, made comparative studies, and prepared a preliminary report. Preparation of a final report was delayed until 1947 by World War II, the withdrawal of federal aid, and other factors.

I wish to thank Dr. Henry V. Howe, Director of the School of Geology, Louisiana State University, and Dr. Fred B. Kniffen, Chairman of the Department of Cultural Geography and Anthropology, for generously releasing to Field Museum of Natural History the data and type collections used in preparing this report. For publishing this report I am grateful to Field Museum of Natural History, its President, Mr. Stanley Field, its Director, Colonel Clifford C. Gregg, and its Chief Curator of Anthropology, Dr. Paul S. Martin. I also wish to thank Miss Lillian A. Ross, Associate Editor of Scientific Publications, for her editorial work in my behalf.

GEORGE I. QUIMBY

THE MEDORA SITE

INTRODUCTION

About fourteen years ago Dr. James A. Ford tentatively formulated a cultural chronology for the lower Mississippi Valley (Ford, 1936). This was the first step in a planned program of archaeological investigation in the region. At that time the cultural sequence in the Mississippi Valley portion of Louisiana was as follows, from earliest to latest: Marksville, Coles Creek, and Natchez.

The second step in the program was the excavation of archaeological sites to "elaborate the details of the cultures at the various time levels" and to "test, and if possible subdivide, the time scale." (Ford, 1936, p. 6.) The excavations undertaken by the Louisiana State Archaeological Survey from 1938 to 1941 were a part of the second step of the program.

As a result of these excavations, the tentative cultural sequence established by Ford in 1936 was modified. The Coles Creek Period was subdivided into Troyville, Coles Creek, and Plaquemine, of which the Medora Site is representative. Heretofore Coles Creek had included most of the complex now recognized as Plaquemine, as well as much of Troyville, although some of Troyville was also included in Marksville. In addition to the subdivision of the Coles Creek and Marksville periods, a new period, Tchefuncte (Ford and Quimby, 1945) was added to the bottom of the cultural sequence. Thus, the modified cultural sequence of the Mississippi Valley portion of Louisiana at the present time is as follows: Natchezan, Plaquemine, Coles Creek, Troyville, Marksville, and Tchefuncte. The Tchefuncte Period is earliest and the Natchezan Period is latest, lasting well into the time of French colonization (1682–1758).

This is the first of several reports, which, when completed, will elaborate the cultural details of the Plaquemine Period and present the stratigraphic evidence for the temporal relationships of Plaquemine, Coles Creek, and Natchezan.

The present plan of operations calls for reports on Plaquemine and Natchezan by me and reports on Troyville and Coles Creek by Dr. Ford. When these reports have been completed, the work of the Louisiana State Archaeological Survey (1938–41) will have been fully reported.

LOCATION AND DESCRIPTION OF SITE

The Medora Site is located in irregular section 40, T. 8 S., R. 12 E. in West Baton Rouge Parish, Louisiana (Fig. 1). The site is adjacent to Bayou Bourbe (or Bourbeau or Bourbaux) on the flood plain of Manchac (also called Australia) Point. Manchac Point is formed by a hair-pin bend of the Mississippi River. Bayou Bourbe, a typical "point stream," flows away from the river in a westerly direction, draining the back slopes of the natural levees that border Manchac Point, and connects eventually with Bayou Gross Tete.

The land upon which the site stands is low (twenty feet above sea level), wet, and subject to annual flooding. It is a part of the Medora Plantation, for which the site is named, and had been cultivated for many years, although at the time of excavation the land was not in use. Permission for the Louisiana State Archaeological Survey to investigate this site was graciously given by the owner of the land, Mr. W. L. Grace, Jr., of Plaquemine, Louisiana.

The site consisted of two mounds separated by a plaza about 400 feet long (Fig. 1). Mound A, at the north end of the plaza, was a truncated pyramid 10 feet high and 125 feet square at the base. It was bordered by a large borrow pit on the north and by Bayou Bourbe on the west. Mound B, at the south end of the plaza, was slightly less than 2 feet high and about 100 feet in diameter, with an irregular outline. It was bordered by Bayou Bourbe on the south and west.

GEOLOGICAL DATING OF MANCHAC POINT

It is possible to date tentatively the formation of Manchac Point by geological means and thereby to obtain an estimate of the period of time within which the occupancy of the Medora Site must have occurred.

A recent study of the history of the alluvial valley of the lower Mississippi River by Dr. H. N. Fisk (1944) contains detailed maps of the river channel at estimated 100-year intervals. According to Fisk (sheet 15, Plate 22) a meander of the Mississippi began migrating from north to south across the area now occupied by Manchac Point

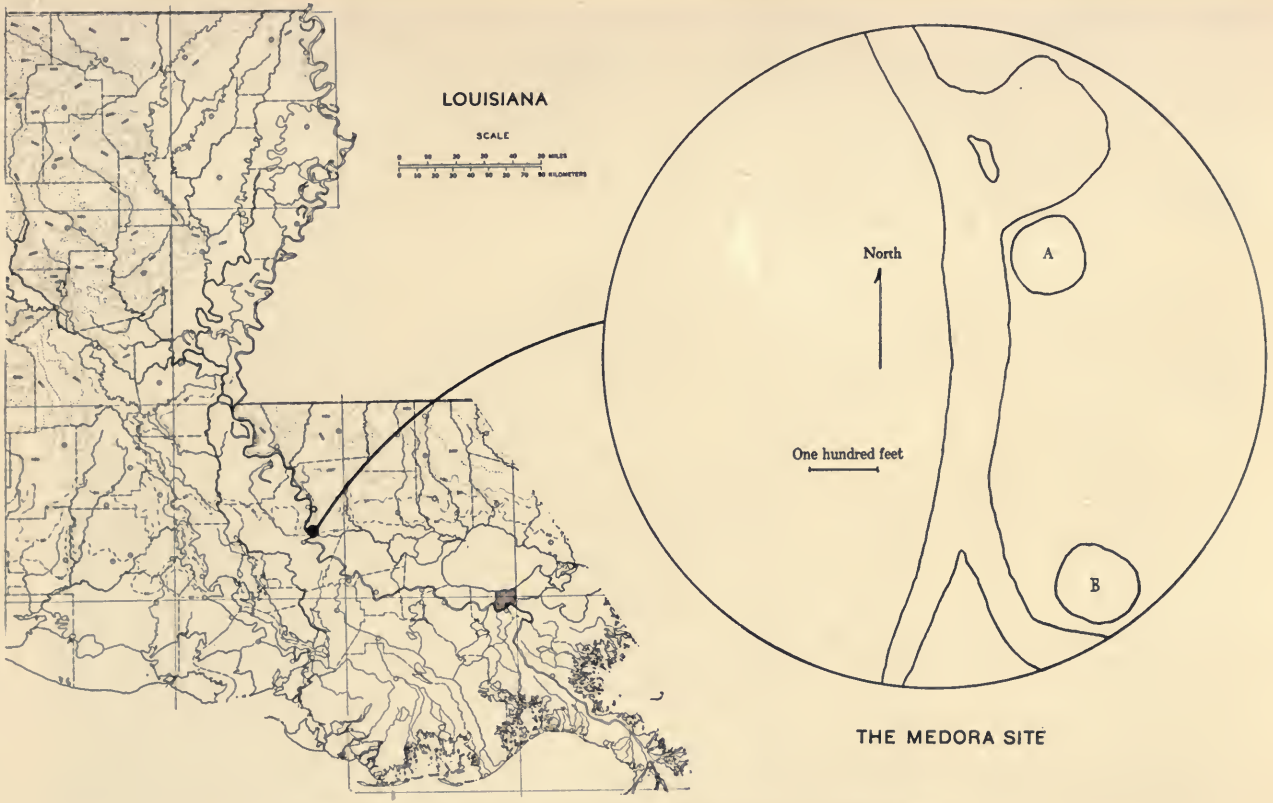


FIG. 1. Map showing location and ground plan of Medora Site.

FIG. 2. Trench and profile across the south end of Mound A.

at stage 9 (A.D. 900). The soil of which Manchac Point is composed was not built up behind the migrating meander until the beginning of stage 13 (A.D. 1300). Thus after that date Manchac Point was suitable for occupancy. The Medora Site, therefore, can not have been older than A.D. 1300. And since Plaquemine culture was not in existence at the time of French exploration (1682–1700), it is probable that the Medora Site represents an occupancy of unknown duration between A.D. 1300 and 1600. However, the initial date of this time span must be regarded as merely a geological estimate.

CHOICE OF SITE FOR EXCAVATION

The choice of the Medora Site for excavation by the Louisiana State Archaeological Survey was based on several considerations. First of all, excavation of this site might provide information about the period between fully developed Coles Creek and historic Natchezan. A study of surface collections obtained previously from this site suggested that the occupancy either was late Coles Creek or was that of an unformulated period that followed Coles Creek but was older than Natchezan.

Another important factor was the availability of Work Projects Administration labor in the area near the site. Still another consideration was the accessibility of the site itself.

METHOD OF EXCAVATION

Excavation of the Medora Site was begun in November, 1939, with thirty excavators, and was completed in April, 1940, shortly before the annual flooding of the area. First, the mounds and surrounding area were surveyed and correlated with two Geological Survey bench marks. Then all of this land was staked out into a grid of 5-foot squares, and elevations were taken at each of the stakes. Finally, a contour map with an interval of one foot was made by means of the grid system and levels. After this map had been completed the actual excavation was begun.

The technique of excavation was a combination of vertical slicing and peeling. In Mound A the trenching proceeded at right angles to the north-south axis of the mound, with crews digging at either end of the axis. Profiles of the complete mound sections were drawn at 5-foot intervals (Fig. 2) and ground plans were made of all major levels. All materials within the fill of the mound were saved and catalogued by either 3- or 6-inch levels within a given square of the grid system. Elevations and measurements were taken of each post-

mold as well as of any other interesting features that could not be located sufficiently by standard levels and squares.

With the exception of two small blocks supporting large live oak trees, all of Mound A was excavated. About a third of Mound B was completely excavated, and numerous test trenches were dug into the remaining parts of the mound. In a vain effort to find a cemetery or thick midden deposit, a network of test trenches was dug in the area adjoining the site. After the excavations had been completed the mounds were restored and all test trenches were filled.

Superficially, the main part of the Medora Site appeared to be one large mound (Fig. 3), which has been called Mound A. This mound was a truncated or flat-topped pyramid about 125 feet square at the base and 10 feet high. However, parts of the mound had been eroded and the corners were considerably rounded. The sides sloped inward toward the top, which in general was flat, except for a conical addition that raised the gross elevation to 12 or 13 feet at the northeast corner of the summit.

Mound B, about 400 feet south and slightly east of Mound A (Fig. 1), was flat-topped, with a somewhat oval outline at the base. It was from one to two feet in height and about 100 feet in diameter at the base. Although it had been modified by plowing and flood waters, probably it never had been more than five feet high. Higher mounds are difficult to plow down and are useful as cattle refuges in flood time, so usually they have been preserved by generations of plantation owners. Moreover, Mound B was structurally analogous to level II of Mound A. Therefore, it is possible that Mound B was more or less as it had been constructed originally.

THE PLAZA

The plaza between Mounds A and B was about 400 feet long and perhaps 200 feet wide. Its west side is bordered by Bayou Bourbe (Fig. 1). Exploratory trenches through the plaza failed to produce any features of interest, although thin patches of midden debris were encountered occasionally.

THE ABSENCE OF BURIALS

With the exception of several Caucasoid graves intrusive into the top of level IV, Mound A, there were no burials found at the Medora Site. Probably there was a Plaquemine Period cemetery somewhere in the vicinity of the site, but attempts to locate it ended in failure.

FIG. 3. View of Mound A before excavation.

MOUND A

The excavation of Mound A revealed evidence of four structural levels, designated I, II, III, and IV, from bottom to top (Fig. 4). These levels were recognized upon the basis of their physical and structural characteristics.

LEVEL I, MOUND A

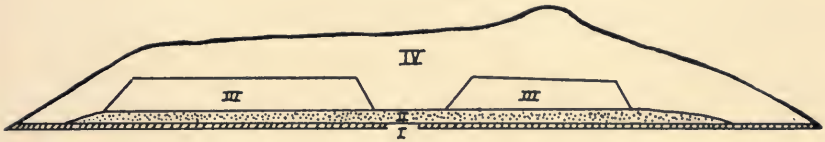
Level I, the pre-mound level, is lowest. It covers an area of about 15,000 square feet (Fig. 5), and includes the original ground surface, some house or ceremonial structures, some midden deposit, pits, and fireplaces. A thin midden deposit, 0.1 or 0.2 feet thick, is scattered over most of the area. Post-molds at this level are so plentiful that they obscure any possible plans of whatever structures they represented. In a few instances, however, it looks as if some of these structures had been square. An attempt to outline structures by lining up post-molds of similar diameter and/or depths was a failure.

In the south-central part of this level were two well-defined houses or temple rings (Fig. 5). The larger of these rings, about 45 feet in diameter, consisted of post-molds set in a trench about 0.5 foot deep and 1.5 feet wide. A prepared floor of clay and sand rose about 0.5 foot above the surrounding levels. Excentrically located within the larger ring was a second house circle about 25 feet in diameter. This ring also consisted of post-molds set in a trench 0.5 foot deep and 1.5 feet wide. The prepared floor within the inner circle was at about the same elevation as the rest of level I, or 0.5 foot lower than the floor between the inner and outer post-mold rings.

Inside and near the center of the small house ring was a cruciform, flat-bottomed pit lined with puddled and burned clay (Fig. 5). This pit was 0.4 foot deep and about 5 feet in diameter, with sides that slanted inward towards the bottom. The pit contained charcoal and burned clay.

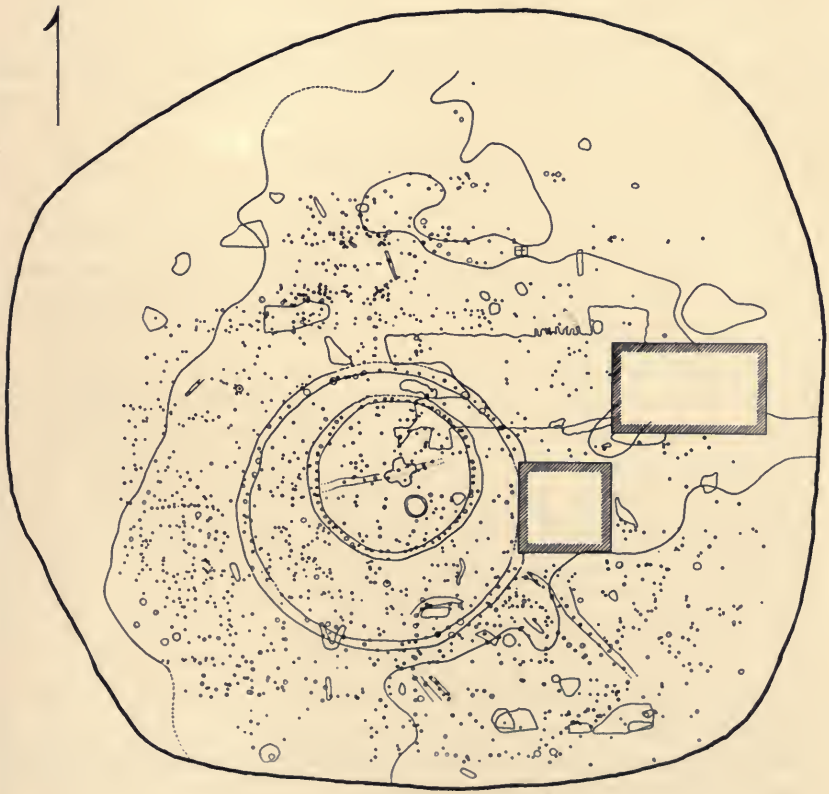
Also within the smaller ring of post-molds and near the center was a small, flat-topped, round, clay altar about 3.5 feet in diameter and 0.5 foot high. The insloping sides were rounded.

The circular trenches seem to represent two buildings, the outer trench ring and raised floor belonging to one house or temple and the inner trench ring, cruciform pit, and raised altar belonging to



One hundred feet

FIG. 4. Idealized diagram of the levels of Mound A.



One hundred feet

FIG. 5. Ground plan of level I, Mound A. Shaded areas not excavated.

the other. Both of these structures fall within the occupancy stage generally represented by level I, although the smaller structure may have been earlier. The cultural material, however, was the same for both structures and it is, of course, possible that only one structure, a rotunda-like building, is represented by both walls and trenches.

About three feet to the southeast of the temple or temples was a post-mold pattern indicative of a house 20 feet square (Fig. 5). Near the southwest wall was a fragment of burned clay bearing the imprints of cane or reed (Fig. 9, lower right). The association of this object with the pattern of post-molds suggests the wattle-and-daub technique of house construction. Numerous post-molds scattered all over level I testify to the former presence of some kind of structures, but their very profusion as well as their uniformity of diameter and depth hinder an interpretation of the plans of the structures.

LEVEL II, MOUND A

Level II consisted of a primary mound or a mantle of earth built on top of level I. This mound had an irregular outline that was somewhat oval, and a flat summit (Fig. 6). The mound, which was from 1 to 2 feet high and about 100 feet in diameter, closely resembled Mound B.

On top of the primary mound there was a shallow midden deposit about 2 inches thick. There were also scattered post-molds, but except for the corner of a square structure in the northeast quadrant of the mound, there were no observable patterns of molds. Consequently, there was plentiful evidence of activity on top of the primary mound, but the nature of this activity is unknown. And moreover, we do not know if it is to be associated with the termination of level II or the inauguration of level III.

LEVEL III, MOUND A

Level III consisted of two pyramidal mounds built on the surface of level II, the primary mound or mantle. The two secondary mounds were truncated pyramids with square bases and summits that were nearly square and flat (Fig. 7).

Pyramidal Mound 1, located on the northeast quadrant of level III, was about 40 feet square at the base and 5 feet high. In the center of the south side was a stepped earthen ramp leading to the summit. On the summit there was a pattern of post-molds some-

what indicative of a square temple (Fig. 7). Portions of the summit were of puddled and burned clay. This suggests that either the mound summit or the temple floor was especially prepared with

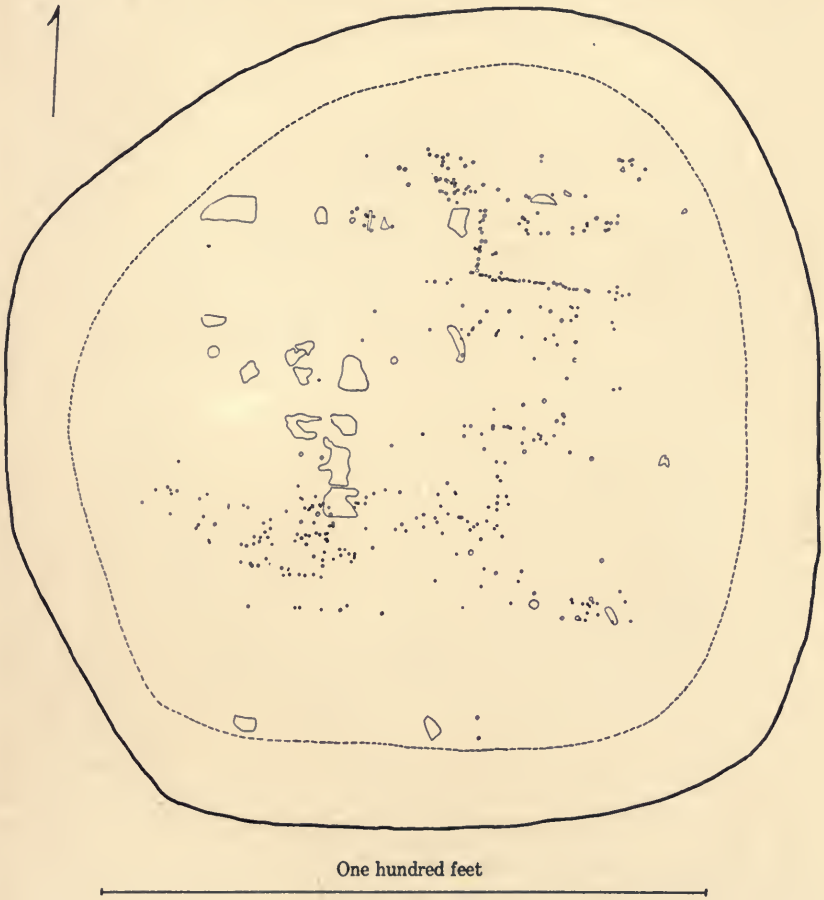


FIG. 6. Ground plan of level II, Mound A.

tamped clay. Then either a number of fires were built on this clay surface or else the temple burned.

Near the center of the summit and probably in the center of the temple floor there were three superimposed pits (Fig. 7). The first pit, lined with puddled, burned clay, was about 4 feet in diameter and 1.3 feet deep. After it had been partly filled with charcoal and dirt, a second pit of about the same size was dug into the floor so

that it overlapped the first pit. When the second pit was partly filled with charcoal and dirt, a third was dug so that it overlapped both the first and second. The third pit was about 6 feet long, 2

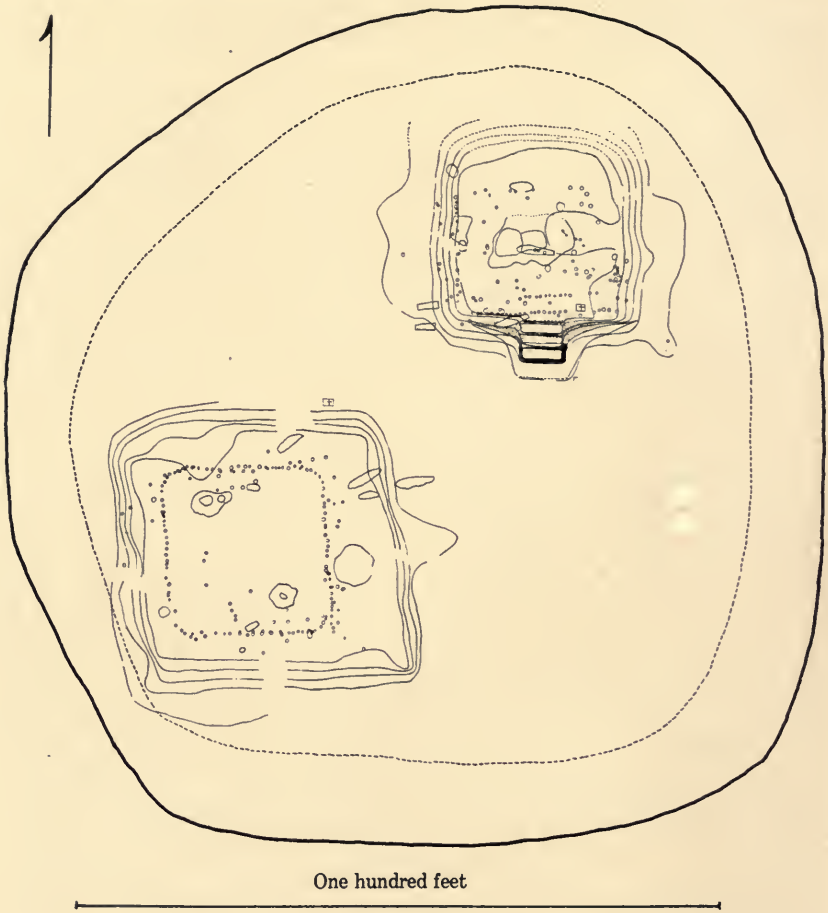


FIG. 7. Ground plan of level III, Mound A.

feet wide, and 1.6 feet deep. It, too, was lined with puddled and burned clay. Unfortunately the debris from these pits was too meager to indicate cultural differentiation or stratigraphy. Presumably the temporal differences are of no cultural significance.

In the north-central portion of the summit there was a shallow, oval fire basin also lined with puddled, burned clay. It was 1.5 feet in diameter and 0.1 foot deep, with a concave bottom.

Mound 1 was constructed of clay and brown silt. Lensing of this material in the fill is indicative of basket loading. Probably the material was collected from the borrow pit just south of Mound A.

Pyramidal Mound 2, also a part of level III, was located in the southwest quadrant of the top surface of level II (Fig. 7). Mound 2

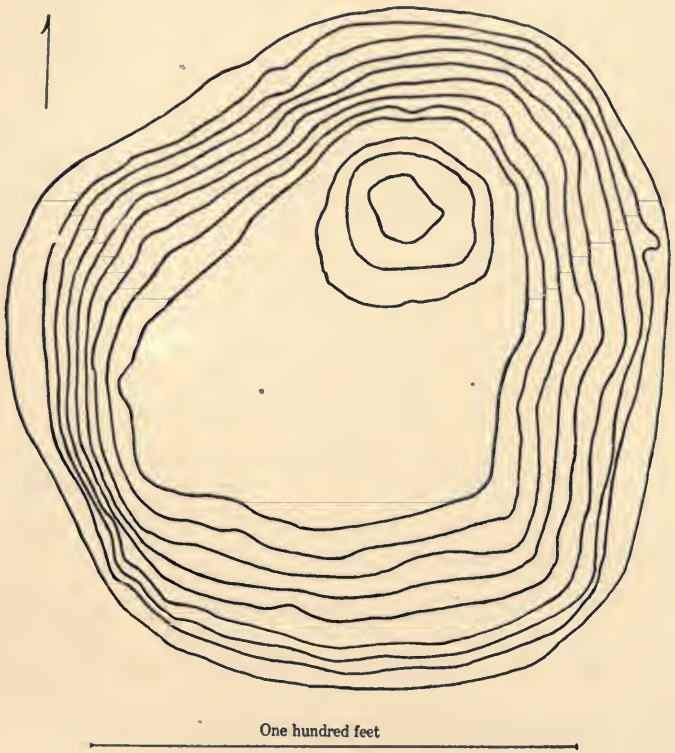


FIG. 8. Ground plan of level IV, Mound A.

also was a truncated pyramid about 4 feet high and 45 feet square at the base. There was no ramp leading to the top, although this mound served as the substructure for a temple 25 feet square, as indicated by the post-mold pattern on the mound summit.

This temple was square, with rounded corners. The post-molds were closely spaced and averaged about a foot in depth. In the northwest corner of the temple there was a clay-lined pit about 6 feet in diameter and a foot deep. A smaller pit and a large post-mold were intrusive into this pit (Fig. 7). Another large pit in the southeast corner of the mound was about 5 feet in diameter and 1.2

feet deep, with a smaller pit intrusive into the center (Fig. 7). Inside the temple were several other small pits and some scattered post-molds. In the eastern part of the summit outside of the post-mold pattern indicative of the temple there was a large pit about 7 feet in diameter and 1.3 feet deep.

Mound 2 was also built of clay and brown silt. The lensing of the mound fill is indicative of basket loading. Each lense probably represents a basket or container of fill of which the mound was built.

LEVEL IV, MOUND A

Level IV, a mantle or tertiary mound built on top of all of the preceding levels (Fig. 8), was a large, truncated pyramid from 125 to 130 feet in diameter at the base and 10 feet high. The summit was generally flat except at the northeast corner, where there was a dome-shaped pile of fill about 3 feet high and 25 feet in diameter. Although the summit had been disturbed by erosion and recent pitting, so that no post-molds were found, probably it once was surmounted by a square or rectangular temple.

The mound was built of gray clay and brown silt. Sporadic areas of lensing suggested some basket-loading of the fill, but in general the profiles at 5-foot intervals showed only consolidated fill.

At its periphery, level IV rests directly upon level I, but elsewhere it rests upon level II or level III (Fig. 4).

SUMMARY OF LEVELS IN MOUND A

The four levels of Mound A, outlined briefly, were as follows (Fig. 4):

I: The pre-mound floor and its associated features.

II: The primary mound or mantle.

III: Two secondary, pyramidal mounds.

IV: The tertiary mantle or final pyramidal mound.

MOUND B

About 400 feet south and slightly east of Mound A there was a low mound about 100 feet in diameter and 2 feet high, which was designated Mound B (Fig. 1). It was flat-topped, with an irregular, oval outline. In many ways it resembled the primary mantle that constituted level II of Mound A.

Mound B was made of gray clay and brown silt. In a few places there was lensing of the fill, indicative of individual loads of earth dumped from baskets.

In the southeast quadrant of the pre-mound surface there was a temple or house, about 20 feet square, which was manifested by a square wall trench with rounded corners and a similar square of post-molds in a double row. It is possible that the wall trench and the post-molds do not represent the same building. If they do not, then there were two buildings constructed on the same spot. The structure represented by the post-molds would have been later than that represented by the wall trench, which would otherwise have obliterated the post-molds. Both the wall trench and the post-molds were 0.7 foot deep.

The floor of the temple contained patches of burned clay and fragments of charcoal. Near the center there was a rounded fire basin about 2 feet in diameter and 0.5 foot deep, lined with puddled and burned clay.

SUMMARY OF MOUND TYPES

The mounds or mound stages at the Medora Site were flat-topped. They functioned as sub-structures or platforms for sacred buildings and/or ceremonies. They were not built for burial purposes like the much earlier dome-shaped mounds of the Marksville Period.

These mounds were either oval or in the form of truncated pyramids. Mound shapes by locus and level are summarized in tabular form below.

Mound Type	*Locus*	*Level*
Ovoid, flat-topped	Mound B	.....
Ovoid, flat-topped	Mound A	Level II
Truncated pyramids	Mound A	Level III
Truncated pyramid	Mound A	Level IV

SUMMARY OF TEMPLE TYPES

The principal evidence of temple types consisted of floor plans indicated by wall trenches and/or post-molds. These ground plans are tabulated below by form, type of evidence, locus and level.

Number	*Ground Plan*	*Evidence*	*Locus*	*Level*
2	Circular	Wall-trenches	Mound A	Level I
?	Square	Post-molds	Mound A	Level I
?	Square	Post-molds	Mound A	Level II
2	Square	Post-molds	Mound A	Level III
1	Square	Wall trenches and post-molds	Mound B	Level I

Except for the information obtained from patterns of post-molds or wall trenches, evidence of temple architecture is scanty. A fragment of burned clay bearing the imprint of cane or reed (Fig. 9, lower right) was found associated with a somewhat indistinct, square pattern of post-molds on level I of Mound A. This suggests wattle-and-daub construction or the plastering of reed studding with clay.

ARTIFACTS FROM THE MEDORA SITE

Artifacts other than pottery sherds were scarce. Although more than 18,000 sherds were found, only seven artifacts of stone were recovered. This ratio of stone artifacts to pottery is commonplace in the lower Mississippi Valley and is in part the answer to complaints that too much emphasis is placed on pottery. Under the circumstances it is difficult to see how one can shift the emphasis.

RIVER PEBBLES

Reddish pebbles of flinty stone were found at all levels in Mound A. Such pebbles do not occur geologically in the vicinity of the Medora Site, so they must have been brought there, presumably from the area around Natchez, Mississippi.

Some of these pebbles had angular fractures, others had large flakes missing, and still others were unmodified. The pebbles could have been used in rattles or perhaps were raw materials for the chipping of projectile points. The frequency of these pebbles by level is as follows:

Level	*Frequency of Pebbles*
Level I	36
Level II	178
Level III	16
Level IV	81
Total	311

PROJECTILE POINTS

Three projectile points of chipped flint were found. Illustrated in Figure 9 (lower left and center) are two points that are ovate-triangular in outline with straight, horizontal shoulders and long, broad stems with squared bases. Both are from Mound A, the larger from level I and the smaller from level II. Neither was specifically associated with any cultural feature other than the level at which it was found.

The third projectile from the site was found in the fill of Mound B. This point (Fig. 9, upper left) is small, thin, and poorly chipped. The sides of the point are incurvate toward the tip, the shoulders are rounded, and the stem is convex at its base.

The two points from levels I and II in Mound A are of types that appear in the Tchefuncte, Marksville, Troyville, and Coles Creek periods. The small point from Mound B is of a type found in the Coles Creek Period or later.

FIG. 9. Artifacts from the Medora Site: upper left, flint projectile point, Mound B; lower left, flint projectile point, level II, Mound A; center, flint projectile point, level I, Mound A; lower right, fragment of burned clay with reed or cane imprint, level I, Mound A; upper right, clay earspool, level IV, Mound A. Powdered chalk has been rubbed into the incised lines on the earspool so that the decoration will show in the illustration.

CELTS

Two ground and polished celts (Fig. 10) made of greenstone were found in Mound A. Both celts are ovate-oblong, with convex bits and polls. The larger is 12.6 cm. long, with a maximum thickness of 1.8 cm. It was associated with level I. The smaller is 7.1 cm. long, with a maximum thickness of 1.5 cm. It was found in the fill of level IV.

SPOON-LIKE OBJECT

A spoon-shaped object of ground and polished greenstone (Fig. 10, lower right) was found in the fill of Pyramidal Mound 2 in level III

of Mound A. This object is 5.7 cm. long and has a maximum thickness of 1.3 cm.

STONE DISCOIDAL

A stone discoidal or chunkey-stone (Fig. 10, center) was found in the fill of level IV, Mound A. This discoidal is made of ground

FIG. 10. Artifacts of ground stone from the Medora Site: left, celt, level I, Mound A; center, discoidal or chunkey-stone, level IV, Mound A; upper right, celt, level IV, Mound A; lower right, spoon-shaped object, level III, Mound A.

and polished sandstone. Both sides are flat and the edges are slightly convex. On each side in the center there is a shallow depression about 1 cm. in diameter. The discoidal has a diameter of 8.7 cm. and a thickness of 3 cm.

This stone probably was used in the well-known game of chunkey, which was played by almost all of the historic Indians of the Southeast. It is very likely that chunkey was played ceremonially in the plaza of the Medora Site.

CLAY EARSPOOL

A decorated earspool of fired clay, found in the fill of level IV, Mound A, is cylindrical, with flat faces and straight sides (Fig. 9, upper right). It is 3 cm. in diameter and 1.8 cm. thick. Although

a fragment of the earspool is missing, the engraved design on one face can be clearly ascertained. This simple geometric design is composed of a circle and curvilinear elements.

The clay earspools characteristic of the preceding Coles Creek Period are also basically cylindrical, but they always possess modifications such as concave sides and/or convex faces. And although they may be painted in a solid color, they do not seem to have engraved or incised designs.

POTTERY FROM THE MEDORA SITE

About 18,508 pottery sherds were obtained from the Medora Site. These sherds, like other artifacts, were collected by grid-square and level within the site and were recorded in terms of a specific provenience. In the laboratory they were classified into pottery types.

These types are synthetic assemblages of ranges of overlapping traits that were abstracted from sherds and vessels that appeared to be similar. As a concept, the pottery type is a symbol representing all or any of the individual pieces subsumed by the class or type. Any sherd or whole vessel ought to be recognizable in terms of the description of the type to which it belongs. Moreover, the type should exhibit some significance in terms of culture change in space or time or both.

Although the initial classification of Plaquemine pottery types was based on materials from the Medora Site, the classification presented here also takes cognizance of Plaquemine materials obtained by C. B. Moore (1912) and J. A. Ford (1936); and from two other sites excavated later by the Louisiana State Archaeological Survey. These additional Plaquemine Period sites will be described in subsequent reports.

More than twenty pottery types were found at the Medora Site. However, not all of these were new. The following have been described in this report: Addis Plain; Plaquemine Brushed; Manchac Incised; Hardy Incised; Medora Incised; Harrison Bayou Incised; Evangeline Interior Incised; Australia Interior Incised; L'Eau Noire Incised; Dupree Incised; and Lulu Linear Punctated. The system of classification and the style of presentation of these pottery types are those in general use in the southeastern United States (see Ford and Willey, 1940; Ford and Quimby, 1945; Haag, 1939).

ADDIS PLAIN

(Figure 11)

Paste

Method of Manufacture: Coiling, indicated by coil fractures.

Temper: Clay tempering almost to the exclusion of other tempering; small amounts of sand, or carbonized vegetal material are used rarely. Clay tempering is usually in the form of medium to small particles which often can be seen readily because of differential coloration.

Texture: Medium fine, usually even, occasionally contorted. Carbonized smudging on exterior of some sherds.

Hardness: (Exterior surface) 2–2.5.

Color: Ranges in buffs, tans, grays, smoke blacks. Many sherds show gray cores in contrast to interior and exterior surface colors.

Surface

Modifications: Smoothing on both the exterior and interior. Tooling marks are occasionally visible on the exterior. Sherds are generally without surface erosion. Some pieces, particularly those with smoke black color, have a low polish.

Decoration

None. Bowl shapes occasionally have lip notching or a single incised line encircling the interior of the vessel rim just below the lip.

Form

Rim: Usually unthickened. Straight or straight outslanting for bowls. Various minor rim modifications for pots are used but the rim is basically a straight one. The only rim developments not directly affected by basic vessel shape are everted rims and rim straps made by folding or welding a strap to the exterior. Both treatments are rare. Occasional sherds show drilled holes adjacent to old vessel breaks, indicating that repairs had been attempted.

Lip: Usually rounded and flattened; otherwise either flat or round. Occasional lip notching or, even more rarely, rim scalloping.

Body: Shallow bowls with either straight or straight outslanting rims outnumber all other vessel shapes combined. Since the typical bowl shape is always without shoulders and has a rounded bottom developing from a shallow curve, bottom sherds can seldom be segregated from body sherds. However, some flat bottoms occur. The rim diameter ranges from 20 to 51 cm., averaging 35 cm.

Straight-walled jars and jars with moderately constricted necks make up the remainder of the observed shapes. The straight-walled jars may have straight, slightly inslanting, or slightly outslanting rims. The vessels with constricted necks have either straight or slightly flaring rims.

Unlike the bowl shapes, in which the maximum vessel diameter is the rim diameter, the maximum diameter of the jar shapes is probably distant from the rim by one-third to one-half of the total height of the vessel. The rim diameters range from 10 to 50 cm. and average about 27 cm. Since the maximum diameters are only slightly greater than the rim diameters, the former are estimated to average 30 cm.

Base: Vessel bottoms are rounded or flat, pseudo-annular, or square flat. The rounded bottoms, probably limited to bowl-shaped vessels, are unthickened, and the individual sherds can seldom be separated from body fragments. The flat, pseudo-annular, and square flat bottoms were used for bowls and jars. Rounded bottoms, either unthickened or slightly thickened, are the most frequent types in this group. Pseudo-annular bases have a clay strap that is added to the outside of the vessel wall, forming a flange or lateral extension to the normal base. In other instances a similar effect is obtained by pinching and shaping the base edge without the addition of an exterior clay strap. Square, flat bases are very rare and are always from vessels with round-bodied shapes.

Appendages: Few or none. Small lugs at the lip area are rare.

Size

Thickness of Lip: 3–7 mm. Average: 5 mm.
Thickness of Rim: 3–8 mm. Average: 6 mm.

Usual Range of Type

Sites in east-central Louisiana.

Chronological Position of Type in Range

Coles Creek and Plaquemine periods.

Probable Relationships of Type

Addis Plain is obviously very closely related to *Coles Creek Plain* of the Coles Creek Period. The essential difference is the dominance of bowl- and dishpan-shaped vessel forms exhibited by *Addis Plain*. Although the pastes of both types are difficult to separate, in many instances the paste of *Coles Creek Plain* seems to be of better quality than that of *Addis Plain*.

Addis Plain occasionally includes some rim sherds that are similar to, if not identical with, those of a type called *Haynes Bluff Plain* by Ford and Willey (1940, p. 48), and also includes a few rim sherds exhibiting profiles characteristic of Ford's prehistoric Tunica complex (Ford, 1936, Fig. 22, *m* and *n*).

FIG. 11. Pottery sherds of Addis Plain.

Bibliography

Quimby, 1942, p. 265 and Pl. XV, Figs. 1–3.

PLAQUEMINE BRUSHED

(Figure 12)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Clay and lumps of clay; one or two sherds with small amounts of sand in them. The size of the clay aplastic ranges from minute particles up to angular lumps 2 mm. in size. The tempering is rather abundant.

Texture: Rather fine texture, well consolidated and slightly contorted. Clay tempering particles are often visible but do not protrude.

Hardness: (Exterior surface) 2–2.5.

Color: Brown, buffs, tans, grays, and smoke blacks. Core is usually a bluish gray. The sherds often contrast in color with their contained temper particles although the latter have about the same range in color.

Surface

Modifications: Smoothed on exterior and interior. Tooling marks can be seen on both sides.

Decoration

Technique: Brushing with a denticulated instrument or perhaps a wad of vegetable fibers. The brush marks vary in depth and individual bands of brushing are easily traced.

Design: Multiple, parallel lines in bands of variable width, and either horizontal, vertical, or oblique in arrangement. All three arrangements may appear on the same vessel. In addition, slanting bands of brushing may cross in an opposing diagonal any of the other horizontal, vertical or oblique brushed decorative elements.

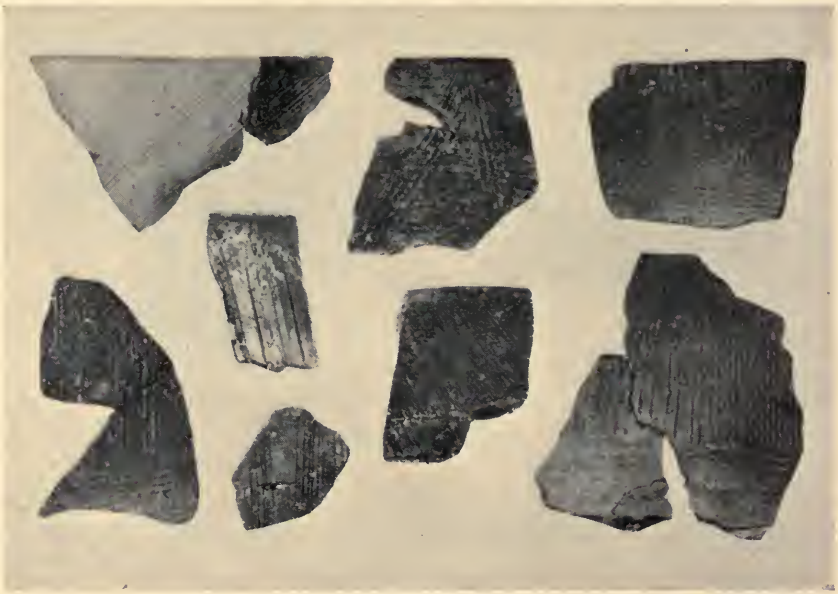


FIG. 12. Pottery sherds of Plaquemine Brushed.

Position: Decoration is confined to the upper half and usually to the upper third of the vessel exterior. There are a few instances in which the decoration covers the whole exterior surface.

Form

Rim: Straight or moderately flared to the exterior. Rims are unthickened or tapered to the lip.

Lip: Round. Otherwise flattened, with rounded edges.

Body: Jars with constricted necks and slightly flaring rims are typical. No other forms have been identified as yet.

Base: Round or flat. Other forms may have been used.

Size

Thickness of Lip: 3–7 mm. Average: 4 mm.

Thickness of Rim: 3–8 mm. Average: 5 mm.

Diameter of Vessel Opening: 11–49 cm. Average: 28 cm.

Usual Range of Type

Sites in east-central Louisiana.

Chronological Position of Type in Range

Plaquemine Period, protohistoric.

Probable Relationships of Type

Identical with the Plaquemine type, *Manchac Incised*, except for the technique of decoration.

Bibliography

Ford, 1936, Fig. 16, *i* and *k*, Fig. 22, *s*, Fig. 26, *h;* Quimby, 1942, p. 267 and Pl. XV, Figs. 13–16.

MANCHAC INCISED

(Figure 13)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Clay and lumps of clay. Rather abundant aplastic with particles ranging up to 2 mm.

Hardness: (Exterior surface) 2–2.5.

Texture: Well consolidated, rather fine, and slightly contorted. Temper particles are visible but do not protrude.

Color: Predominantly gray and smoke gray. Buffs, browns, tans, and smoke blacks. Temper particles often are of contrasting colors.

Surface

Modifications: Smoothed on exterior and interior. Tooling marks are often visible on both sides.

Decoration

Technique: Fine to medium incised lines, V-shaped in cross section. Sometimes accompanied by small punctates made with a pointed instrument held at an angle to the vessel wall.

Design: Multiple, parallel lines in bands either vertical, horizontal, or oblique in arrangement. All three arrangements may appear on the same vessel. The design is of line-filled triangles and herringbones, bands of diagonal lines, or bands of vertical lines, encircling the vessel. The zone of decoration is sometimes limited at the top and bottom by horizontal, narrow incised lines or single or double rows of closely spaced small to medium punctates.

Position: The decoration is confined to a band around the rim of the vessel whose upper margin lies just beneath the lip. In most instances the banded decoration is limited to the upper third of the vessel. The decoration is extended as far as the bottom on some, particularly on cup or small bowl shapes.

Form

Rim: Straight to moderately flaring. Some rims have a flat band or thickening made by folding over the rim on the upper vessel exterior.

Lip: Rounded, or flat with edges rounded.

Body: Jars and bowls. Some jars have straight walls, others have constricted necks and slightly flaring rims. Identifiable bowl sherds were rare at the Medora Site, but their use can be assumed from evidence at other sites. Some bowls are straight-sided, with shallow carinated bodies.

Base: Rounded or flat.

Size

Thickness of Lip: 2–6 mm.

Thickness of Rim: 4–8 mm.

Diameter of Vessel Mouth: 11–50 cm. Average: 29 cm.

Usual Range of Type

Sites in east-central Louisiana.

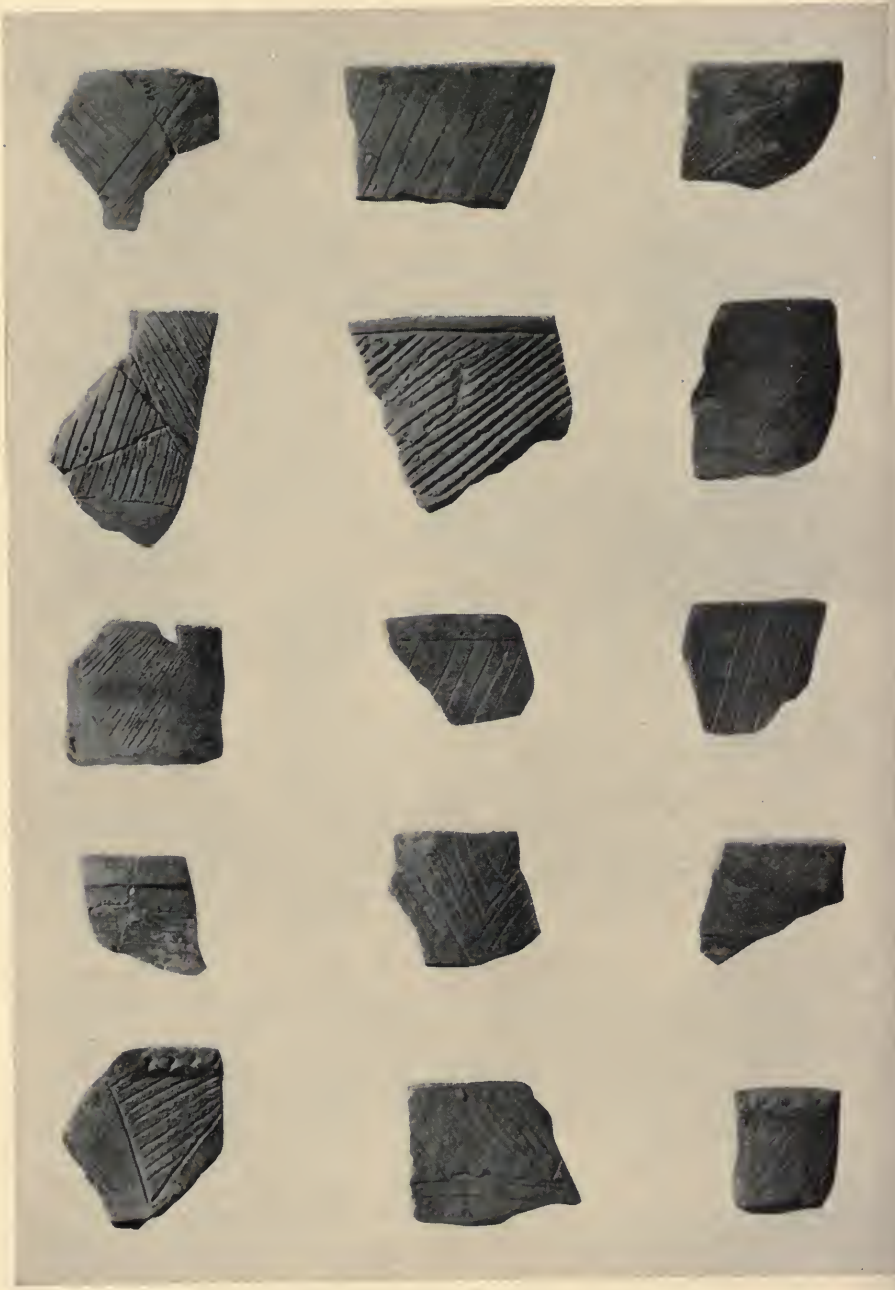


FIG. 13. Pottery sherds of Manchac Incised.

Chronological Position of Type in Range

Plaquemine Period, protohistoric.

Probable Relationships of Type

This type is the same as Plaquemine Brushed except for the decoration technique. Manchac Incised is almost certainly a development of the Coles Creek Period type Mazique Incised, which has been described by Ford and Willey (Southeastern Conference Newsletters, 1939, Haag, ed.). The decoration and the position of the design elements are essentially the same in both types,

FIG. 14. Pottery sherds of Hardy Incised.

although the execution of the Plaquemine Period type is cruder than that of Mazique Incised.

Bibliography

Ford, 1936, Fig. 20, *p*, Fig. 23, *b*, *m*, Fig. 27, *d;* Moore, 1913, Figs. 18 and 19; Quimby, 1942, p. 267 and Pl. XIV, Fig. 7.

HARDY INCISED

(Figure 14)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Clay tempering of medium-sized particles, sparse to abundant. Some sherds with small amounts of sand.

Texture: Medium fine, smooth to touch. Paste is usually even or slightly contorted. Carbonized smudging on exterior of some sherds.

Hardness: (Exterior surface) 2–2.5.

Color: Usually smoke gray or black. Otherwise buff to light brown.

Surface

Modifications: Smoothed on exterior and interior. Tooling marks are often visible.

Decoration

Technique: Incised lines; deep, narrow V-shaped, or shallow, small to medium U-shaped in cross section. Sometimes accompanied by rows of small punctate impressions.

Design: Multiple incised lines parallel to each other and to the vessel rim. Single or double row of punctates below band of incised lines wherever both elements are present.

The incised lines may be closely or widely spaced and number from two to more than twenty. The probable average spacing is 3 mm.

Position: The decoration is applied to the rim area of the vessel in an encircling band.

Form

Rim: Straight, vertical; incurving; or moderately flaring on jar shapes. Straight inslanting, outslanting, or vertical on bowls. Some jar rims have exteriorly folded flat bands.

Lip: Rounded or flattened with rounded edges. One bowl sherd has small, closely spaced lugs encircling the rim. Another rim sherd has deep crenellations in the lip.

Body: Jars and bowls. Jars with constricted necks and slightly flaring rims, or straight-walled, either inslanting, straight or outslanting at the rim. Carinated bowls are probable.

Base: Rounded or flat. Other variations are possible.

Size

Thickness of Lip: 3–6 mm.

Thickness of Rim: 4–8 mm.

Diameter of Vessel Mouth: Average: 23 cm.

Usual Range of Type

Sites in east-central Louisiana.

Chronological Position of Type in Range

Plaquemine Period, protohistoric.

Probable Relationships of Type

The type is a derivative of the Coles Creek Period type, Coles Creek Incised. It lacks the distinctive overhanging line and its paste is softer than that of Coles Creek Incised. Most Hardy Incised sherds have the incised lines spaced farther apart than is usual for Coles Creek Incised.

Bibliography

Moore, 1913, Fig. 13; Quimby, 1942, p. 267 and Pl. XV, Figs. 8–12.

MEDORA INCISED

(Figure 15)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Small particles of clay sparsely scattered through the paste. Occasional white particles may be volcanic tuff.

Texture: Fine, even.

Hardness: (Exterior surface) 2–2.5.

Color: Ranges from tan to smoke black.

Surface

Modifications: Smooth.

Decoration

Technique: Incising by means of an instrument that produced a fine, shallow, V-shaped line.

Design: Line-filled bands either vertical or slanting and separated from each other by undecorated bands or zones.

Position: The vertical or slanting line-filled band design covers the entire vessel wall.

FIG. 15. Pottery sherds of Medora Incised.

Form

Generally bowls or cups.

Rim: Straight, vertical.

Lip: Round or rounded and flattened.

Body: Straight-sided bowls and cups; some carinated bowls.

Base: Flat.

Size

Thickness of Lip: 3–5 mm.

Thickness of Rim: 4–6 mm.

Diameter of Rim: 11–12 cm.

Usual Range of Type

Central Louisiana.

Chronological Position of Type in Range

Plaquemine Period.

Probable Relationships of Type

This type is related to Manchac Incised.

HARRISON BAYOU INCISED

(Figure 16)

Paste

Method of Manufacture: Coiled; coil fractures occur.

Temper: Small particles of clay sparsely scattered through the paste.

Texture: Rather fine, well consolidated, contorted.

Hardness: (Exterior surface) 2–2.5.

Color: Ranges from brown through gray to smoke-black.

Surface

Modifications: Smooth.

Decoration

Technique: Incising. Narrow lines with rounded sections.

Design: An encircling, horizontal band of rather widely spaced cross-hatching. The elements are slanting.

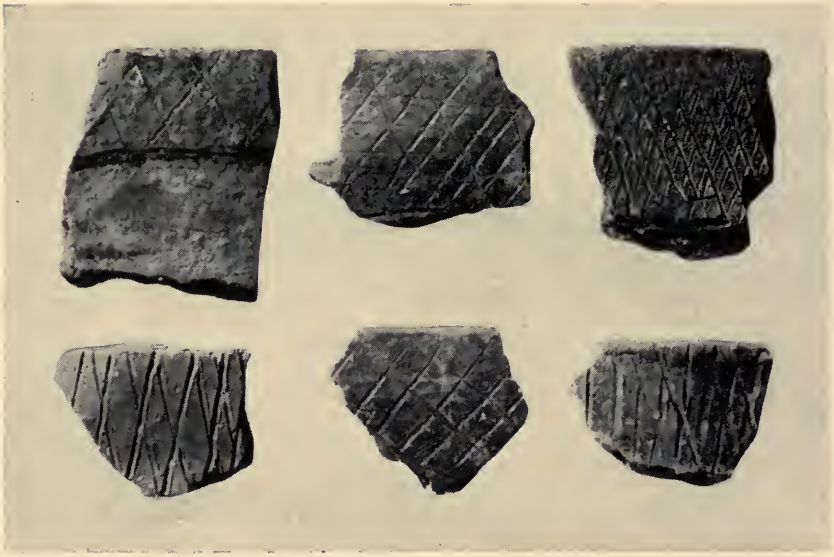


FIG. 16. Pottery sherds of Harrison Bayou Incised.

Position: Decoration is confined to the rim, occasionally to a strap-thickened section of the rim.

Form

Rim: Straight, vertical; slightly outcurved, or slightly flaring. Sometimes thickened by the addition of a strap of clay, welded firmly to the vessel wall.

Lip: Rounded and flattened, sometimes slightly everted.

Body: Jar-shaped vessels with rounded shoulders and constricted necks. Also flower-pot-shaped vessels with straight outslanting walls.

Base: Flattened. Rounded bases may occur.

Size

Thickness of Lip: 4–7 mm.

Thickness of Rim: 5–10 mm.

Diameter of Vessel Mouth: 14–51 cm. Average: 25 cm.

Usual Range of Type

Sites in east-central Louisiana.

Chronological Position of Type in Range

Plaquemine Period, protohistoric.

Probable Relationships of Type

Harrison Bayou Incised seems to be a derivative of Beldeau Incised, a Coles Creek Period marker type.

Bibliography

Ford and Willey, 1940, p. 50.

FIG. 17. Pottery sherds of Australia Interior Incised.

AUSTRALIA INTERIOR INCISED

(Figure 17)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Particles of clay. Tempering ranges from sparse to abundant.

Texture: Fine, well consolidated.

Hardness: (Exterior surface) 2–2.5.

Color: Light brown to smudged gray.

Surface

Modifications: Smooth.

Decoration

Technique: Incised lines either rounded or V-shaped in cross section.

Design: Multiple parallel incised lines encircling the vessel interior. Lines are spaced from 5 to 7 mm. apart.

Distribution: Confined to rim. Ranges down from the lip according to the number of lines. Lines usually number more than three. Central part of vessel interior is undecorated.

Form

Rim: Straight, outslanting.

Lip: Rounded, or rounded and flattened.

Body: Plate, or shallow plate-like bowls.
Base: Slightly rounded.

Size
Thickness of Lip: 4–5 mm.
Thickness of Rim: 4–6 mm.
Diameter of Vessel Mouth: 50–55 cm. Average: 52 cm.

Usual Range of Type
Sites in east-central Louisiana.

Chronological Position of Type in Range
Plaquemine Period, protohistoric.

Probable Relationships of Type
The type is related to Anna Interior Engraved, L'Eau Noire Incised, Evangeline Interior Incised, Addis Plain, and Hardy Incised.

EVANGELINE INTERIOR INCISED

(Figure 18)

Paste
Method of Manufacture: Coiling; coil fractures occur.
Temper: Clay. Fine to granular.
Texture: Rather fine, well consolidated.
Hardness: (Exterior surface) 2–2.5.
Color: Brown, gray, smudged-black.

Surface
Modifications: Smooth.

Decoration
Technique: Rather crude incised lines, rounded in cross section.
Design: Parallel, diagonal lines, rather widely spaced cross-hatched lines, line-filled triangles, and other line-filled plats of undetermined shape and scope.
Distribution: Sometimes confined to a band about 2.5 cm. wide encircling the inside edge of the vessel. Often the band is much wider. The banded decoration is usually confined between two parallel encircling incised lines. The center of the vessel interior is undecorated.

Form
Rim: Straight and outslanting.
Lip: Rounded or rounded and flattened.
Body: Plate or shallow plate-like bowls.
Base: Slightly rounded.

Size
Thickness of Lip: 4–5 mm.
Thickness of Rim: 5–7 mm.
Diameter of Vessel Mouth: 22–50 cm. Average: 30 cm.

Usual Range of Type
Sites in east-central Louisiana.

Chronological Position of Type in Range
Plaquemine Period, protohistoric.

Probable Relationships of Type

The decoration of this type shows relationship with that of Manchac Incised and Anna Interior Engraved. The criteria of shape and paste relate the type to Addis Plain, Australia Interior Incised, and plates of L'Eau Noire Incised.

FIG. 18. Pottery sherds of Evangeline Interior Incised.

L'EAU NOIRE INCISED

(Figure 19)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Small particles of clay scattered through paste in quantities ranging from sparse to abundant.

Texture: Rather fine, paste well consolidated.

Hardness: (Exterior surface) 2–2.5.

Color: Light tan, gray, dark gray, and smudged black.

Surface

Modifications: Smooth.

Decoration

Technique: Engraving or incising.

Design: Curvilinear and/or linear elements arranged in a complicated pattern that is solid and blocky.

Position: On plate-like bowls the design is placed in a broad band on the interior of the rim. The central interior is undecorated. On bowls and jars, the design is on the exterior rim or body, or both.

FIG. 19. Pottery sherds of L'Eau Noire Incised.

Form

Rim: Straight, outslanting on plates or shallow bowls; straight, vertical; straight, outslanting; or slightly flaring on bowls and jars.

Lip: Rounded, narrowed and rounded, or somewhat flattened.

Body: Plates; shallow, plate-like bowls; bowls of various forms, including carinated bowls; and jars of various forms.

Base: Rounded or slightly rounded on plates and bowls; flat on jars.

Size

Thickness of Lip: 4–8 mm.

Thickness of Rim: 5–8 mm.
Diameter of Plates: 15–43 cm. Generally about 31 cm.
Diameter of Bowls: 20–35 cm.

Usual Range of Type
Central Louisiana.

Chronological Position of Type in Range
Plaquemine Period.

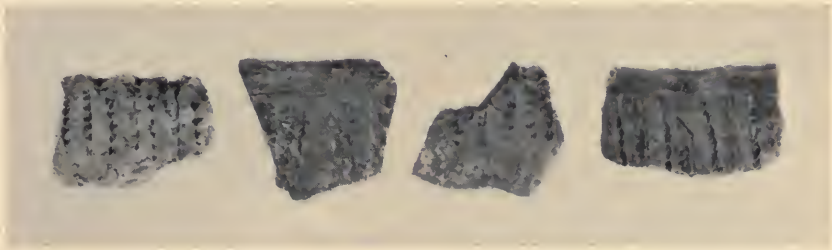


FIG. 20. Pottery sherds of Lulu Linear Punctated.

Probable Relationships of Type
Although the paste is like that of other Plaquemine types, the technique of engraving shows relationship with Caddoan types.

Bibliography
Moore, 1909, Fig. 117; 1912, Fig. 2.

LULU LINEAR PUNCTATED

(Figure 20) –

Paste
Method of Manufacture: Coiling; coil fractures occur.
Temper: Small particles of clay scattered through the paste in quantities that range from sparse to rather abundant.
Texture: Fine, contorted.
Hardness: (Exterior surface) 2–2.5.
Color: Tans, grays, and soot-black. Wide cores, gray or black.

Surface
Modifications: Smooth.

Decoration
Technique: Dual linear punctating. Punctate impressions in paired vertical rows produced by "walking" the two pointed legs of a forked implement up the surface to be decorated.
Design: A band of vertical, parallel, somewhat closely spaced rows of paired, linear punctate impressions. The band is in some instances emphasized by encircling incised lines at top and bottom.
Position: Band is on the rim and begins at the lip or just beneath it.

Form
Rim: Straight, usually inslanting, sometimes vertical.

Lip: Rounded; rounded and flattened; sometimes notched.

Body: Jars without shoulders, either straight-sided or, usually, slightly constricted at the mouth.

Base: Flattened.

Size

Thickness of Rim: 5–7 mm.

Diameter of Vessel Mouth: 12–29 cm. Average: 21 cm.

Usual Range of Type

A minority type in sites of east-central Louisiana.

Chronological Position of Type in Range

Plaquemine Period, protohistoric.

DUPREE INCISED

(Figure 21)

Paste

Method of Manufacture: Coiling; coil fractures occur.

Temper: Small particles of clay scattered throughout paste.

Texture: Medium, granular.

Hardness: (Exterior surface) 2–2.5.

Color: Ranges from brown to black.

Surface

Modifications: Smoothed surface, sometimes slightly polished.

Decoration

Technique: Incising and punctating. Punctations are made with pointed instrument, either dots or jagged commas, carelessly executed.

Design: Generally confined to the upper parts of vessel exteriors. Consists of angular zones or rectilinear bands of punctations confined by incised lines. The patterns are arranged vertically, slanted slightly, or in V's. Most examples of the design look like poor copies of the design on Rhinehart Punctated, an earlier Coles Creek type. However, some Dupree Incised designs are suggestive of Medora Incised patterns.

Position: The design is confined to the upper vessel walls for the most part, but may cover the entire exterior above the base. In the latter case the design resembles that of Medora Incised.

Form

Rim: Inslanting straight rims, incurving rims, and slightly flaring rims.

Lip: Rounded or somewhat flattened.

Body: Jars are most common form. There are some simple bowls and some carinated bowls.

Base: Rounded or flattened.

Size

Too few data.

Usual Range of Type

Sites in eastern Louisiana and southwestern Mississippi. The type is not abundant.

Chronological Position of Type in Range

Late Coles Creek and Plaquemine.

Probable Relationships of Type

Obviously derived from Rhinehart Punctated, a Coles Creek Period type.

Bibliography

Moore, 1909, Fig. 3; Ford, 1936, Fig. 23, *a*, and perhaps Fig. 23, *g*.

FIG. 21. Troyville, Coles Creek, and Plaquemine sherds: upper left, Chevalier Stamped; lower left, Dupree Incised; upper right, Troyville Stamped; lower right, Pontchartrain Check Stamped.

COLES CREEK POTTERY TYPES IN THE PLAQUEMINE ASSEMBLAGE

In addition to the Plaquemine pottery types that have just been described there are a few Coles Creek pottery types that are a part of the Plaquemine assemblage at the Medora Site. These types are Chevalier Stamped (Fig. 21), Coles Creek Incised, Larto Red Filmed, and Pontchartrain Check Stamped (Fig. 21). In Plaquemine Period sites these types are a part of the Plaquemine cultural assemblage. They are associated directly with Plaquemine period pottery and other artifacts. Moreover, they exhibit the same or nearly the same paste characteristics as Plaquemine pottery. Consequently they seem to be an integral part of the Plaquemine cultural complex.

The Coles Creek types found at the Medora Site have not been described in this report, because complete descriptions of them will be included in the forthcoming reports by Dr. J. A. Ford. Also a preliminary description of most, if not all, Coles Creek types has appeared in the Southeastern Archaeological Conference Newsletters (Haag, ed., 1939).

OTHER POTTERY TYPES AT THE MEDORA SITE

Some Troyville Period sherds, mostly of the type Troyville Stamped, were found at all levels in Mound A. It seems doubtful that Troyville types persisted into the Plaquemine Period. More likely these sherds represent the vestiges of a transient occupancy of the Medora area, and probably were included in the earth fill obtained from the borrow pit just north of Mound A.

Sherds indicative of late periods are four examples of Fatherland Incised (Quimby, 1942, p. 263) and two examples of Sanson Incised (Ford and Willey, 1940, pp. 53–54).

SUMMARY OF PLAQUEMINE PERIOD POTTERY

With the exception of 44 shell-tempered sherds, the pottery of the Plaquemine Period is quite uniform in paste characteristics. The paste is soft, clay-tempered, and poorly fired. The color is variable, but generally ranges in grays and tans.

The pottery has a smooth surface finish that feels soft and chalky to the touch. Most of the sherds are undecorated. At the Medora Site the undecorated sherds constituted about 90 per cent of the 18,508 sherds collected. However, in terms of whole vessels, this percentage is somewhat large, because many of the undecorated sherds represent plain parts of decorated vessels. Decorated sherds constitute about 10 per cent of the total. The decorative techniques used are incising, engraving, brushing, and punctating, with incising and brushing the most common. The designs are usually simple arrangements of straight-line elements, although on the type L'Eau Noire Incised curvilinear elements in complicated patterns appear. The various designs are usually placed on the exterior vessel wall. Sometimes they are confined to the rim, sometimes to the entire vessel wall; usually only the upper third of the vessel is decorated. In the case of plates, however, the inside wall from base to lip is generally decorated, but the central portion is always left undecorated.

The most common vessel forms are jars and bowls, although cups and carinated bowls are occasionally present in the collections from the Medora Site and bottles have been recorded from Plaquemine sites in east-central and north-central Louisiana. There are two variants of the jar-shape: (1) jars without constriction of the neck, and (2) jars with constriction of the neck. Apparently most of the jars were flat-bottomed. Basilar parts of jars from the Medora Site have been classified into four types: round, flat, square flat, and pseudo-annular bottoms.

FREQUENCIES OF POTTERY TYPES IN THE PLAQUEMINE ASSEMBLAGE AT THE MEDORA SITE

	Number of sherds
Addis Plain	16,400
Shell-tempered plain ware	44
Plaquemine Brushed	624
Manchac Incised	383
Hardy Incised	250
L'Eau Noire Incised	235
Evangeline Interior Incised	83
Australia Interior Incised	72
Medora Incised	49
Lulu Linear Punctated	34
Harrison Bayou Incised	79
Chevalier Stamped	68
Pontchartrain Check Stamped	48
Dupree Incised	43
Larto Red Filmed	6
Coles Creek Incised	2
Troyville types	20
Fatherland Incised	4
Sanson Incised	2
Unclassified wares with varied decoration generally suggestive of Plaquemine decorated types	62
Total	18,508

Addis Plain was the most popular type found at the Medora Site. However, since this type includes not only sherds from undecorated vessels but also plain sherds from the undecorated parts of decorated vessels the percentages tend somewhat to overemphasize the importance of plain wares in the Plaquemine culture. By counting only rim sherds it is possible to eliminate the undecorated portions of ornamented vessels and obtain a percentage that more accurately represents the cultural importance of Addis Plain. But even with the pottery counts restricted to rim sherds Addis Plain

constitutes more than 50 per cent of the total of Plaquemine pottery at any given level in Mound A, or of the Medora Site as a whole. And by counting all sherds classified as Addis Plain the type is represented by about 90 per cent of the 18,508 sherds found at the site.

Addis Plain represents 88 to 91 per cent of the total number of sherds found in any one of the four levels of Mound A. Consequently, it is easy to see that the relative popularity of Addis Plain remained constant throughout the period of occupancy of Mound A. The sherd counts for the four levels are listed below.

POTTERY TYPES	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
Addis Plain	4,560	2,250	1,480	4,394
Shell-tempered ware	8	1	..	6
Plaquemine Brushed	131	38	46	213
Manchac Incised	97	60	53	151
Hardy Incised	78	43	26	81
L'Eau Noire Incised	107	5	8	22
Evangeline Interior Incised	24	18	9	20
Australia Interior Incised	9	1	1	20
Medora Incised	28	9	2	4
Lulu Linear Punctated	22	2	0	4
Harrison Bayou Incised	18	12	3	24
Coles Creek Incised	...	...	1	1
Chevalier Stamped	15	16	2	6
Pontchartrain Check Stamped	20	12	2	6
Dupree Incised	10	3	9	13
Larto Red Filmed	5	1	...	...
Fatherland Incised	...	...	...	4
Sanson Incised	...	...	...	2
Troyville types	7	1	4	4
Unclassified	1	3	4	31

CULTURAL UNIFORMITY OF SITE

As the various loci and levels of the Medora Site were revealed by excavation, it was considered probable that the physical stratigraphy would correlate with differences in ceramic types and frequencies of types. Accordingly, preliminary graphs of the relative frequencies of pottery types by level were prepared. Although these graphs suggested some ceramic trends which will be discussed in future reports, they showed no significant major changes in ceramic style throughout the history of the site. The Plaquemine types, the few Coles Creek types, and the Troyville types were found in all loci and all levels from earliest to latest. Consequently, one must assume the approximate contemporaneity of all loci and levels within the site.

All of the pottery and other artifacts found in the site were accidental inclusions in the fill of mound mantles or in their midden deposits. None of these artifacts showed any evidence of intentional placement. And since Plaquemine types were predominant in every locus and level, one must conclude that no part of the site is earlier than the Plaquemine Period.

The presence of pottery types characteristic of periods earlier than Plaquemine can be interpreted either as evidence of the persistence of the types from an earlier period or as merely indicative of an earlier transitory occupancy of some part of the general site area. If the latter interpretation is correct for the Troyville types, then the early material was included with the contemporary materials mixed with the dirt that was scooped up in the construction of the different mound stages or mantles.

The predominance of Plaquemine types in all loci and all levels plus the lack of any significant change in relative percentages of types is suggestive of a relatively short occupancy of the site. The mound stages or mantles were constructed in rather rapid succession, and the occupancy of the site was culturally uniform. Thus the mounds and plaza were constructed, used, and abandoned within the Plaquemine Period by Indians whose ceramic complex contained some Coles Creek types and a number of new types characteristic of the period.

THE PLAQUEMINE CULTURE

A complete presentation of the Plaquemine culture and Period must await the analysis and interpretation of additional data. Ideally the limits of Plaquemine culture as well as the beginning and end of the Plaquemine Period could best be defined in terms of a graph of relative frequencies of pottery types and other cultural traits from the Coles Creek, Plaquemine, and Natchezan periods. Then the most obvious criteria of culture change could be used to define the periods despite the gradation of one period into the other in temporal succession and in cultural variation. Lacking such detailed information, it is possible, nevertheless, to provide a tentative and gross definition of Plaquemine and to differentiate it from the earlier Coles Creek culture and from the later Natchezan culture.

Plaquemine culture is characterized by the following traits:

Concept of plaza.
Construction of truncated, pyramidal mounds.
Superposition of mounds.
Mounds with stepped ramps.
Mounds without ramps.
Buildings (temples) on mound summits.
Buildings (temples) on ground level beneath mounds.
Buildings (temples) with square ground-plan outlined by post-molds.
Buildings (temples) with square ground-plan outlined by wall trenches and post-molds.
Buildings (temples) with circular ground-plan outlined by wall trenches and post-molds.
Post and wall trench construction on ground level beneath mounds.
Post construction without wall trenches on mound summits.
Pits for fire and/or refuse.
Clay-lined pits for fire and/or refuse.
Cross-shaped pit.
Circular "altar."
Pottery: Addis Plain, Plaquemine Brushed, Manchac Incised, Hardy Incised, L'Eau Noire Incised, Evangeline Interior Incised, Australia Interior Incised, Medora Incised, Lulu Linear Punctated, Shell-tempered plain ware, Harrison Bayou Incised, Chevalier Stamped, Pontchartrain Check Stamped, Dupree Incised, Larto Red Filmed, and Coles Creek Incised.
Stemmed projectile points of chipped flint.
Celts of ground and polished stone.
River pebbles.
Spoon-like object of ground stone.
Discoidal of ground stone.
Cylindrical ear ornament of fired clay.

The Plaquemine culture was the product of agricultural peoples. This may be inferred from the nature of the Plaquemine Period

sites and their cultural content. And although direct evidence of agriculture was lacking at the Medora Site, the Plaquemine level of occupancy at the Bayou Goula Site produced small fragments of charred corncobs.

Plaquemine pottery is an outgrowth of Coles Creek pottery. And although many characteristics of Coles Creek pottery are present in Plaquemine types, Plaquemine pottery is easily recognizable in terms of the rather high frequencies of dishpan-shaped bowls of plain ware, plates with interior decoration, and jars with brushed decoration. These pottery characteristics seem to be uniquely Plaquemine in the context of the lower Mississippi Valley cultural continuum.

CULTURAL CLASSIFICATION

In terms of the system of classification used in the lower Mississippi Valley the Plaquemine complex of traits represents both a culture and a period. This classification is a result rather than a means to an end. The Plaquemine complex and its position in time and space are being described as clearly as the available information allows. The arbitrary boundaries that separate Plaquemine from the earlier, contemporary, or later cultural groupings are the result of the act of defining the complex. Thus Plaquemine is a completely artificial segment taken from the cultural continuum of the region. But this artificial segment is also a historical reality. And by knowing the cultural content and position in time and space of Plaquemine and other arbitrary segments of the cultural continuum the continuum itself may be known.

Although individual traits of the Plaquemine complex may be found in other assemblages and in other times and places, the Plaquemine culture is a unique combination of traits found only in the Plaquemine Period. One may speak with equal meaning either of the Plaquemine culture or of the Plaquemine Period.

In terms of the Midwestern Taxonomic System the Plaquemine complex as represented by excavated sites and survey collections probably would be an aspect of a phase that would include Natchezan and Coles Creek. However, no attempt has been made here to demonstrate the taxonomic position of Plaquemine.

STRATIGRAPHIC POSITION AND AGE

Although there was no stratigraphy of cultures at the Medora Site, evidence from elsewhere indicates that the Plaquemine culture

and/or Period is later than Coles Creek and earlier than Natchezan. At the Bayou Goula Site (to be described in a future report) in Iberville Parish, Louisiana, there was a Plaquemine occupancy underlying the Natchezan occupation of the site. The Natchezan culture is frequently found in association with European trade materials of the period A.D. 1700–1750. The Plaquemine culture, however, has not been found in association with European trade goods. Thus the terminal date of Plaquemine is at some time before A.D. 1700 and before the beginning of Natchezan.

According to the geological estimate of the time of the formation of Manchac Point (p. 88) the Medora Site could not have existed before A.D. 1300. If this estimate is correct, the Plaquemine-Natchezan sequence seems to have been encompassed in the period from A.D. 1300–1700.

By means of Krieger's extension of Puebloan datings to the Mississippi Valley the introduction of shell tempering of pottery in the "Caddo area" can be dated at not later than A.D. 1500 (Krieger, 1947, pp. 251–252, Fig. 26). In the lower Mississippi Valley sequence shell tempering appears for the first time in the Plaquemine Period. Since both the lower Mississippi Valley and the "Caddo area" seem to have been peripheral to the development of shell tempering, it is probable that both areas received shell tempering at about the same time. If this is so, then Plaquemine would have a beginning date of A.D. 1500 or earlier.

On the basis of the available evidence one would guess that Plaquemine lasted from before A.D. 1500 to perhaps 1600 and that Natchezan began about 1600. Natchezan culture from 1700 to 1750 is, of course, known from the records of French explorers, missionaries, and military men.

The Plaquemine culture is younger than Coles Creek. The stratigraphic proof of this fact will appear in forthcoming reports by Ford, but some of the evidence can be discussed briefly here.

Plaquemine is an outgrowth of Coles Creek. What is now called Plaquemine formerly was identified as late Coles Creek by Ford. Therefore it has long been recognized that Plaquemine (late Coles Creek) was younger than Coles Creek. Moreover, Coles Creek underlies Plaquemine at several sites in central Louisiana. However, to demonstrate the stratigraphy at those sites is beyond the scope of this report.

Most Plaquemine pottery types are obvious outgrowths of Coles Creek types; for instance, Hardy Incised is a development of

Coles Creek Incised and Manchac Incised grew out of the Coles Creek type, Mazique Incised. Moreover, a number of actual Coles Creek types persist into the Plaquemine Period.

There are in Plaquemine, however, a number of ceramic traits lacking in Coles Creek but known in varying frequencies for Natchezan; for instance, shell tempering is present in small amounts in both Plaquemine and Natchezan, and brushed decoration, so characteristic of Plaquemine, persists into Natchezan times along with other Plaquemine styles of ceramic ornamentation. Consequently, even without the aid of direct stratigraphy and solely on the basis of the distribution of ceramic styles among Coles Creek, Plaquemine, and Natchezan, one would conclude that the temporal sequence of late cultures in central Louisiana was first Coles Creek, then Plaquemine, and finally Natchezan.

CULTURAL CONTEMPORARIES

A number of cultural resemblances between Plaquemine and other cultures in the lower Mississippi Valley and adjacent areas seem to be indicative of cross-cultural relationships and imply some degree of contemporaneity. However, attempts to demonstrate these cultural relationships will be postponed until reports of two other Plaquemine sites excavated by the Louisiana State Archaeological Survey have been completed. Nevertheless, some of the probable relationships can be indicated at this time and demonstrated later. For instance, the Tunica complex described by Ford (1936, pp. 98–140) is largely analogous to Plaquemine, but it probably is not historic Tunica, although it may well be ancestral to historic Tunica. Most of Ford's Tunica complex probably is coeval with Plaquemine. The late occupancy of the Crooks Site in La Salle Parish, Louisiana (Ford and Willey, 1940) probably is contemporaneous with the Plaquemine culture.

The Plaquemine culture shares some ceramic resemblances with different Caddoan foci and aspects (Krieger, 1947). It is difficult, however, to see specific relationships tying Plaquemine to any one Caddoan focus or aspect. Plaquemine shares resemblances with such an early Caddoan focus as Sanders and such a late Caddoan focus as Belcher, which also shares resemblances with Natchezan.

When the Plaquemine culture is more fully elucidated by the addition of data from two more excavated sites, it probably will be possible to see more clearly its relationships with Caddoan.

SUMMARY

In the lower Mississippi Valley there is a protohistoric period and/or culture—the Plaquemine—described in a preliminary fashion in this report, which is largely based on data from the Medora Site, a one-time ceremonial center. The Plaquemine Indians were agricultural peoples who built ceremonial centers consisting of pyramidal mounds of earth surmounted by temples and built about a plaza. These Indians made a number of different kinds of pottery, and a few tools and weapons of chipped or ground stone. The Plaquemine culture was an outgrowth of the earlier Coles Creek. The Plaquemine culture and/or Period was earlier than Natchezan. In forthcoming reports the Plaquemine culture will be more fully elucidated.

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